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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/934,867	08/22/2001	Joel Erwin Goldstein	06170 USA	9264
23543	7590	04/16/2004	EXAMINER	
AIR PRODUCTS AND CHEMICALS, INC. PATENT DEPARTMENT 7201 HAMILTON BOULEVARD ALLENTOWN, PA 181951501			MORRIS, TERELL H	
			ART UNIT	PAPER NUMBER
			1771	

DATE MAILED: 04/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

AS

Office Action Summary	Application No. 09/934,867	Applicant(s) GOLDSTEIN ET AL.	
	Examiner Terrel Morris	Art Unit 1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) 21 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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1. Applicant's response after Final rejection has been entered and carefully considered. The Examiner agrees with Applicant that the Richards reference fails to anticipate the concept of a substantially free boron containing binder (substantially free being defined as less than 0.05wt%). Instead, Richards teaches only low boron content and requires boron to be present. Therefore the Finality of the last Office action is hereby withdrawn. Despite this, additional prior art exists which teaches premoistened dispersible wipes having no boron content but having good in-use tensile strength.

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-3, 7, 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Viazmensky et al., US 5,292,581.

The patent to Viazmensky is directed to wet wipes having improved wet strength despite packaging and prolonged storage in a wet condition (Abstract). The wet wipes are capable of disintegration within a septic system after a brief period of time. The wipes incorporate up to 2% by weight of a wet strength additive (column 2, lines 50-61). The wet strength agent is polyamide-epichlorohydrin resin which is a cationic, water-soluble thermosetting reaction product and contains secondary amine groups (column 4, lines 46-65). The basis weight of the nonwoven web is 20-110 grams per square meter (column 5, lines 14-18). The absorptive capacity of the nonwoven is 600 % or more (column 5, lines 36-39) and are adapted for general family use as a wet hygienic wiping towel that will retain its strength characteristics despite

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packaging and prolonged storage in a wet condition (column 5, lines 40-43). The wipes can have preservatives added (column 5, lines 45-46). Additionally, the moisturizing or wetting ingredients are mainly water that may contain other conventional ingredients such as bactericides, fungicides, bacteriostats, glycerine, lanolin and the like (column 5, lines 47-51). As can be seen from the patent, the material is boron free, has the required wet tensile strength (see examples and tables of the patent), and employs a polymeric binder within the scope of the instant claims. "Water-binding compounds" are not mentioned *per se*. However, Applicant's specification sets forth that such compounds as preservatives can serve as water-binding compounds (instant specification page 10, line 22 through page 11, line 1). Since the material of Viazmensky fulfills the performance requirements of the claim and applicant states "The water-binding compound suitable for use in the aqueous lotion composition is any compound which, when added in sufficient quantity, prevents the dissolution of the water-soluble component or the redispersion of the water-dispersible component of the nonwoven binder" it appears the preservatives of Viazmensky would correspond to the water binding compound and thus anticipate the claims.

4. Claims 1-5, 7, and 9 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Win et al., US 5,667,635.

Win is directed to a pre-moistened wet wipe with provides functional wet strength in use yet is dispersible if flushed. This is accomplished with a multi-layer structure wherein the outer plies contain a wet strength agent to provide we poke-through resistance (Abstract). The wet strength agents are typically water soluble, cationic oligomeric or polymeric resins that are capable of either crosslinking with themselves or with the cellulose or other constituent of the

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wood fibers (column 2, lines 63-67). Typical materials include Polyamide-polyamine-epichlorohydrin resins (column 3, lines 1-21). The amount of liquid in the wet wipes can be from 100 to 700 % by weight (column 3, lines 29-32). The composition of the liquid in the wipes can be any adequately preserved aqueous surfactant solution (column 3, lines 35-38). Example 1 sets forth a wet out composition comprising 98.4% water, 1% Phospholipid PTC (cocamidopropyl pg-dimonium chloride phosphate), 0.4% Germol 2, and 0.2% sodium benzoate.

Since the material of Win fulfills the performance requirements of the claim and applicant states "The water-binding compound suitable for use in the aqueous lotion composition is any compound which, when added in sufficient quantity, prevents the dissolution of the water-soluble component or the redispersion of the water-dispersible component of the nonwoven binder" it appears the preservatives of Win would correspond to the water binding compound and thus anticipate the claims.

5. Claims 1-4 and 9 are rejected under 35 U.S.C. 102(e) as being anticipated by Chang et al., US 6,423,804 (filed December 31, 1998).

Chang is directed to ion-sensitive, hard water dispersible polymers, fiber-containing fabrics and webs comprising ion-sensitive, hard water dispersible binders compositions and their applicability in water dispersible personal care products (Abstract) such as flushable wet wipes (column 3, lines 17-25; column 6, lines 41-53). The binder contains 10-20% solids and plasticizers, perfumes, coloring agents, antifoams, bactericides, surface active agents, thickening agents, fillers, tackifiers, detackifiers, and similar additives can be incorporated (column 7, lines 5-10). Tensile strength may be increased as much as 500% (column 7, lines 25-29). The fabrics retain significant tensile strength in aqueous solutions containing greater than about 0.5 weight

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percent NaCl or a mixture of monovalent and multivalent ions and are suitable for use in premoistened wipes (column 7, lines 46-58). Packaged, premoistened wipe utilities are specifically discussed at column 9, line 36 through column 10, line 4. In this patent, the salt additive accounts for the "water-binding agent" as well as the sulfate anion of hydrophilic monomers of acrylic or methacrylic acid (column 5, lines 18-37). Suitable polymers are discussed at column 4, lines 15-56.

6. Claims 1, 3-6, and 9-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Yeo, US 5,509,913.

The patent is drawn to flushable compositions useful in flushable household wipes which disintegrate and disperse in the presence of ordinary tap water but still have sufficient wet tensile strength during use (Abstract). The patent takes advantage of polymer solubility with respect to temperature (column 5, lines 53-57). The patent teaches making wipe products using a temperature sensitive polymer binder in combination with a regulating salt such as sodium phosphate or sulfate (column 5, lines 61-67). Suitable polymers include polyvinyl alcohol (column 6, lines 1-9, columns 6 & 7, and Examples 6-8). Premoistened wipes are mentioned at column 5, lines 1-3.

7. Claims 2, 7 and 11-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yeo, US 5,509,913 in view of Richards, US 5,629,081.

The features of Yeo have been set forth above. While Yeo discusses pre-moistened wipe applications, it does not discuss the actual features thereof. Richards, as set forth in earlier office actions, is directed to premoistened wipe applications employing polyvinyl alcohol binders and teaches the suitable components for such wipes such as water content, lotion compositions and

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additives. Since Yeo is silent to the particulars of this application, it would be necessary and therefore obvious for one of ordinary skill to look to the prior art to supply the missing details. As Richards is closely related to the applications and materials of Yeo, it would have been obvious to one of ordinary skill in the art in possession of Yeo to look to Richards for the missing particulars, motivated by the expectation of successfully practicing the invention suggested by Yeo.

8. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yeo, US 5,509,913 in view of Richards, US 5,629,081 further in view of Cole et al., US 6,673,358.

The features of Yeo and Richards are set forth above. Both are silent about the use of disodium cocoamphodiacetate. However, Cole is directed to wet wipes that have improved tactile properties and cleaning (Abstract). In addition to its primary teachings, Cole teaches at column 6, lines 49-67 that useful surfactants in wet wipes to enhance cleansing ability include disodium cocoamphodiacetate. Therefore, since the art recognizes the use of this material as a suitable surfactant in wet wipe compositions to improve the basic properties desired in wet wipes, it would have been obvious to one of ordinary skill in the art to include this surfactant in the invention of Yeo.

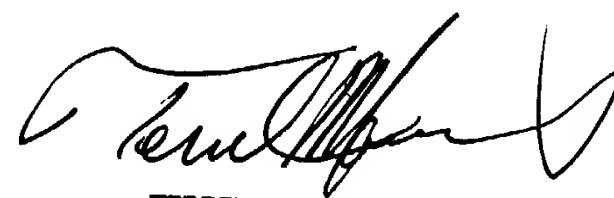
9. Copies of the following references not previously supplied are enclosed: US 5,972,805 to Pomplun et al. for being directed to wet wipe water soluble polymer binder compositions.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Terrel Morris whose telephone number is 571-272-1478. The examiner can normally be reached Monday-Friday from 6:30 am to 3:00 pm.

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The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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